

**'07 STATE ADVISORY FORUMS** 

# State of the Industry and Rhode Island Overview October 3, 2008

Presented by: Laura\_Backus\_Hall@ncci.com 802-454-1800

# Rhode Island Workers Compensation System— An Overview

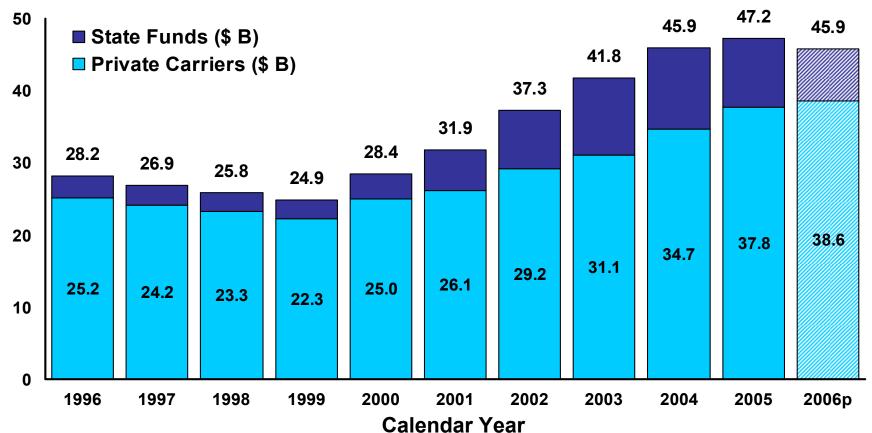
- Premium declined for the first time in eight years
- Indemnity benefits represent more than 60% of total benefit costs
- Decline in indemnity loss ratios, slight increase in medical loss ratios
- Highest lost time claim frequency, lowest claim severity in region



# Countrywide Total Workers Compensation Premium Declined in 2006

#### \$ Billions

#### **Net Written Premium**



p Preliminary

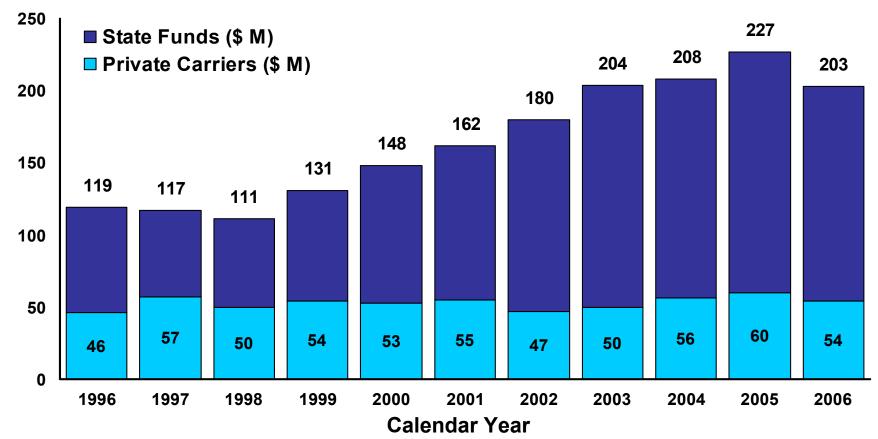
Source: 1996–2005 Private Carriers, A.M. Best Aggregates & Averages; 2006p, NCCI 1996–2006p State Funds: AZ, CA, CO, HI, ID, KY, LA, MO, MT, NM, OR, RI, TX, UT Annual Statements



# Rhode Island Workers Compensation Premium Declined in 2006

#### **\$ Millions**

#### **Net Written Premium**

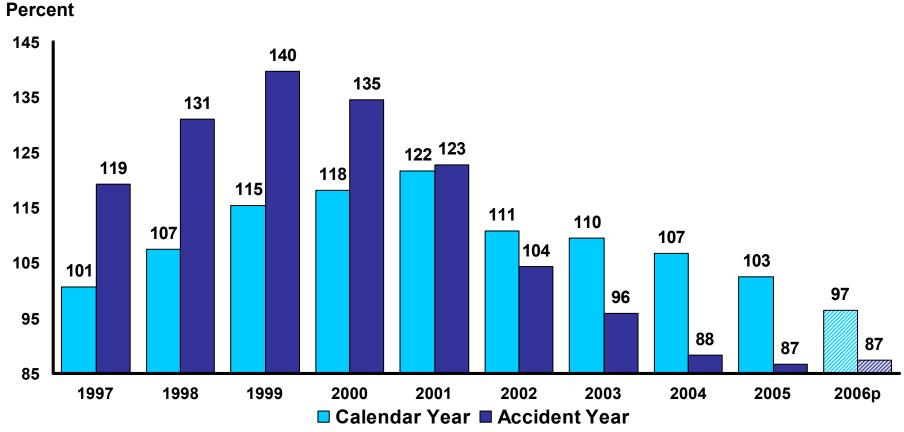


Source: NAIC Annual Statement data



### Countrywide Accident Year Combined Ratio— Another Underwriting Profit in 2006

Workers Compensation—Private Carriers Calendar Year vs. Ultimate Accident Year



p Preliminary

Accident Year data is evaluated as of 12/31/2006 and developed to ultimate

Source: Calendar Years 1997–2005, A.M. Best Aggregates & Averages;

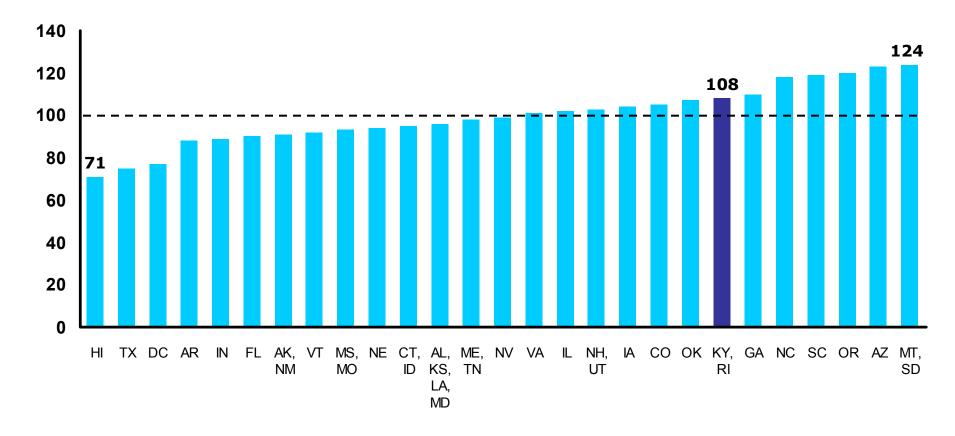
Calendar Year 2006p and Accident Years 1997–2006p, NCCI analysis based on Annual Statement data

Includes dividends to policyholders



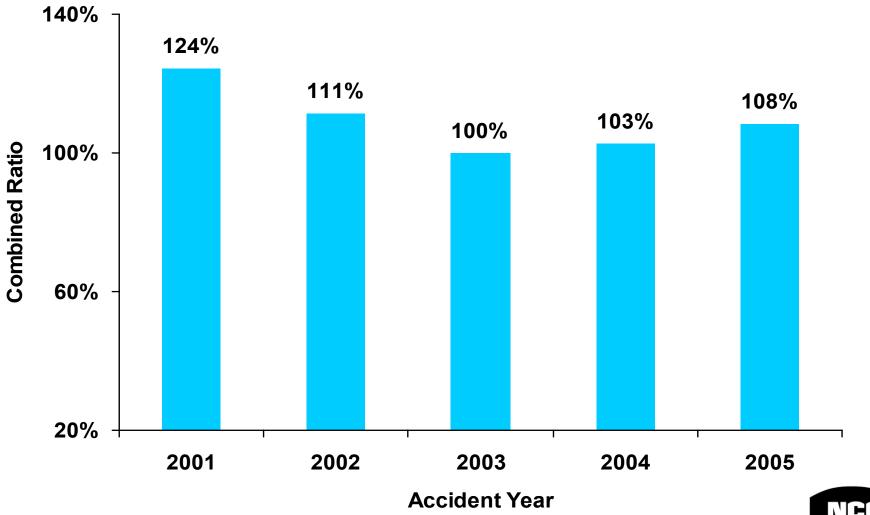
### **Results Vary From State to State**

#### **Accident Year 2005 Combined Ratios**



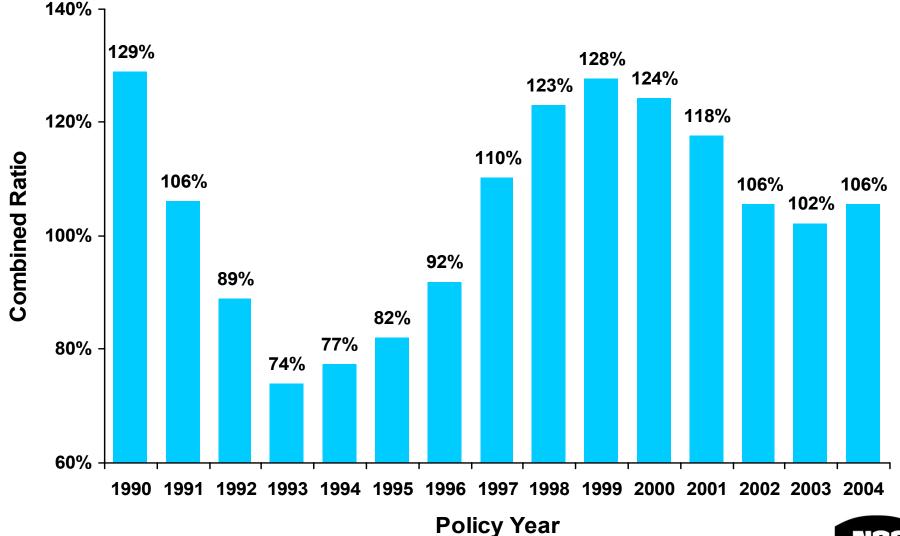


# Rhode Island Accident Year Combined Ratios



Source: NCCI financial data, NAIC Annual Statement data

# Rhode Island Policy Year Combined Ratios

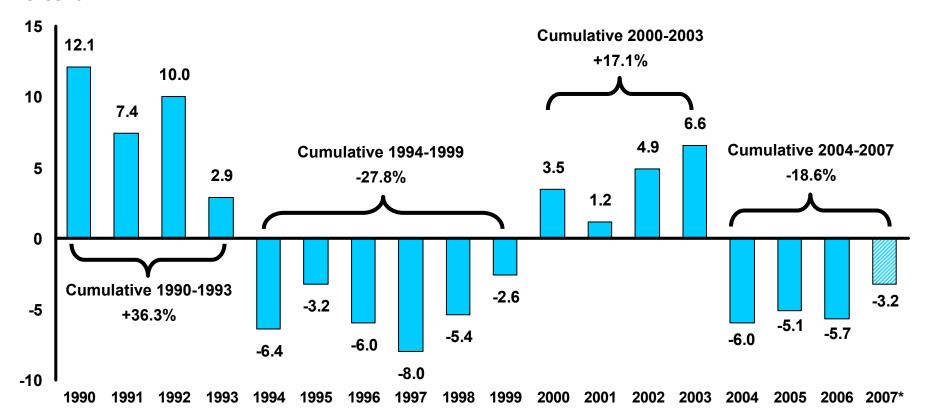


Source: NCCI financial data, NAIC Annual Statement data

# Countrywide Average Approved Bureau Rates/Loss Costs

**History of Average WC Bureau Rate/Loss Cost Level Changes** 

#### **Percent**



#### Calendar Year

\* Preliminary Countrywide approved changes in advisory rates, loss costs, and assigned risk rates as filed by the applicable rating organization.



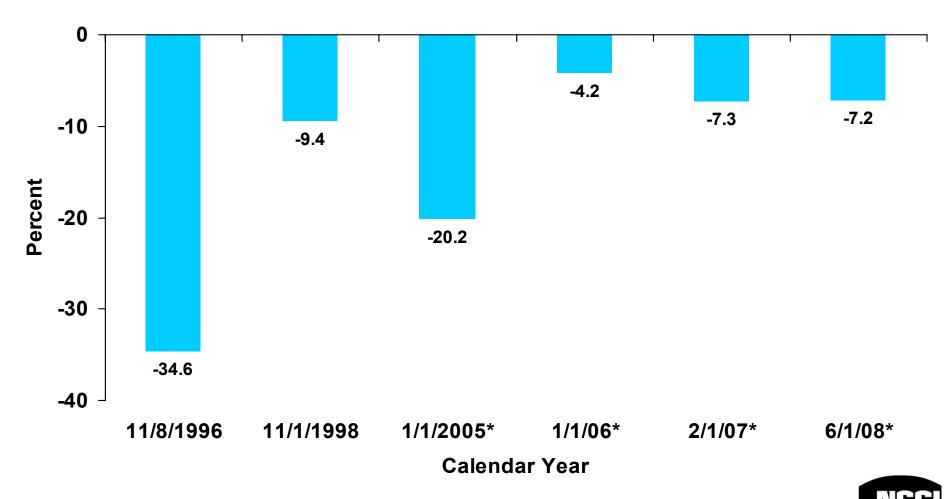
# **State Voluntary Market Filings Northeastern States**

Connecticut	1/1/08	+3.4%
New Jersey	1/1/07	+1.3%
Vermont	4/1/07	-0.6%
Maine	1/1/08	-2.2%
New Hampshire*	1/1/09	-1.9%
Rhode Island	6/1/08	-7.2%
Massachusetts	9/1/07	-16.9%
New York	10/1/07	-18.4%



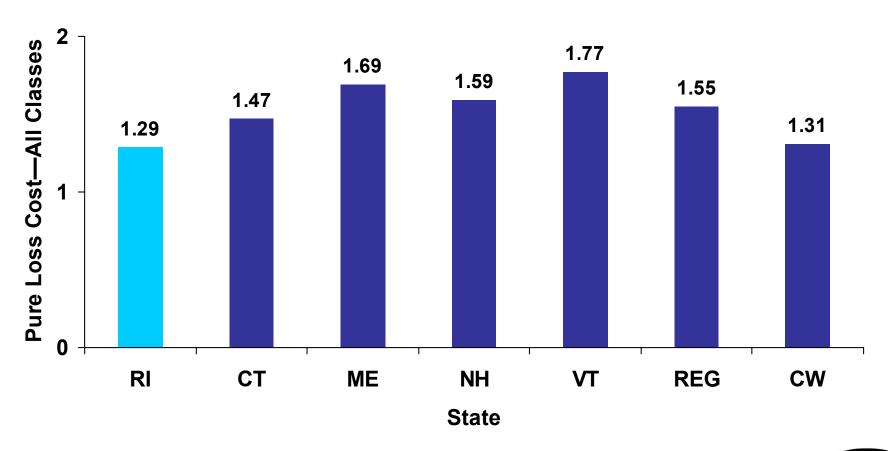
### **Rhode Island's Filing Activity**

#### **Loss Cost Filing History**



<sup>\* 1/1/05, 1/1/06,</sup> and 2/1/07 Loss Cost + LAE

# Current Average Voluntary Pure Loss Costs Using Rhode Island's Payroll Distribution



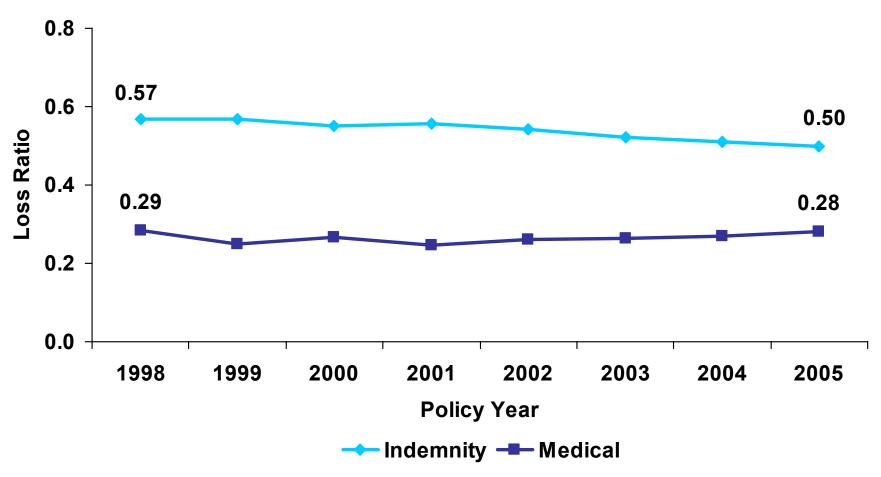


## Countrywide Workers Compensation Claim Frequency and Severity

- Countrywide frequency continues to decline.
   In fact, for each of the last 9 years (and 14 of
   the last 16), on-the-job claim frequency for
   workers compensation injuries has declined
   from the previous year's level.
- Countrywide medical and indemnity costs continue to rise—somewhat negating the good news regarding reduced claims.



# Rhode Island's Indemnity and Medical Loss Ratios



Based on NCCI's financial data at current benefit level and developed to ultimate. Data as of 12/31/2005

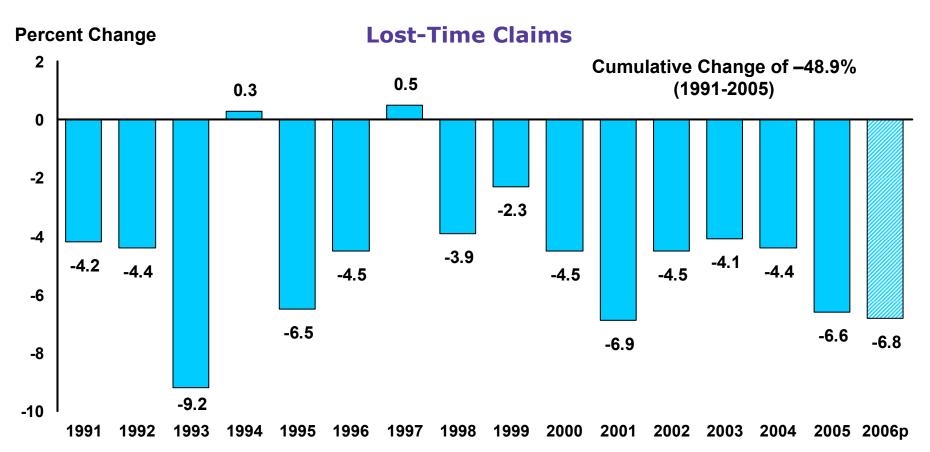




**'07 STATE ADVISORY FORUMS** 

## **Claim Frequency**

## Countrywide Workers Compensation Lost-Time Claim Frequency Continues Its Decline



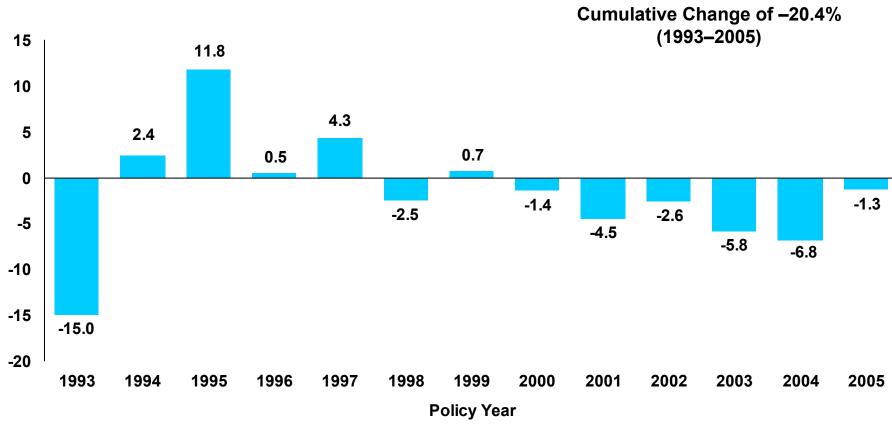
2006p: Preliminary based on data valued as of 12/31/2006 1991–2005: Based on data through 12/31/2005, developed to ultimate Based on the states where NCCI provides ratemaking services. Excludes the effects of deductible policies.



## Rhode Island Workers Compensation Lost-Time Claim Frequency

#### **Lost-Time Claims**

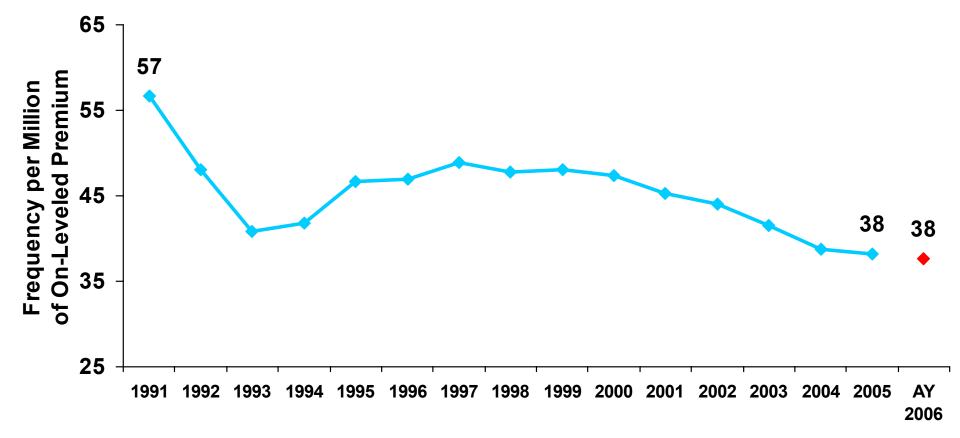




Based on data through 12/31/06, developed to ultimate.



# Declines in Claim Frequency Have Contributed to Rhode Island's Improving Results



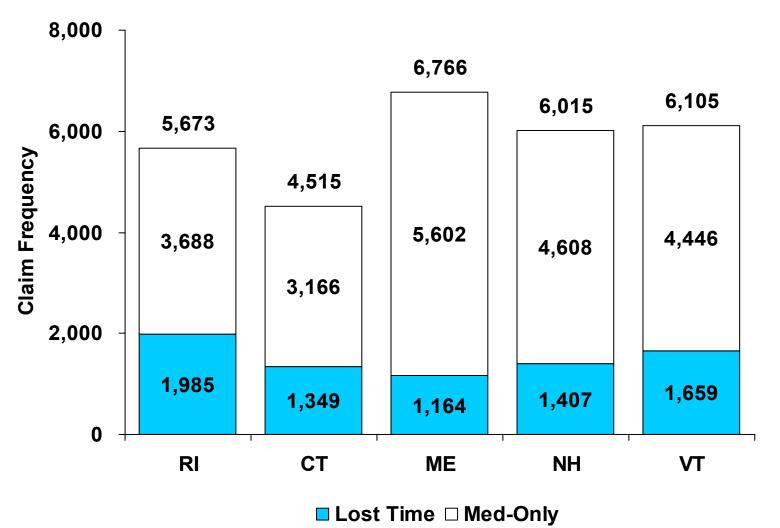
**Policy Year** 

Based on NCCI's financial data. Frequency of lost-time claims.

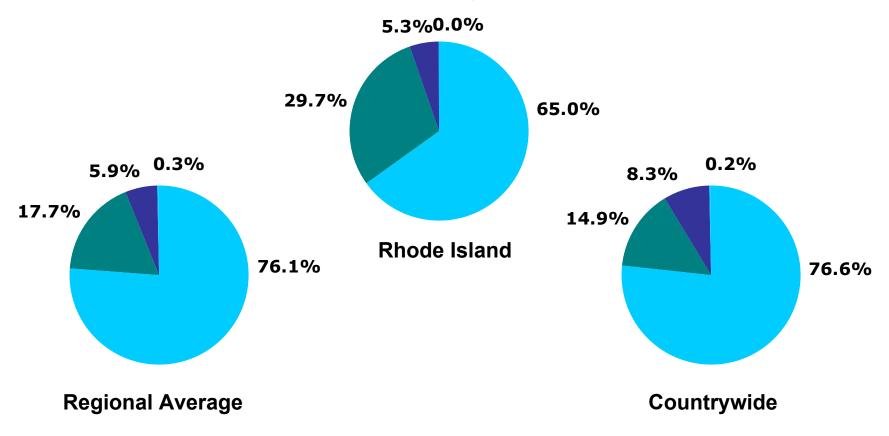


### **Rhode Island Average Claim Frequency**

Frequency per 100,000 Workers—All Claims



# Rhode Island's Distribution of Claims by Injury Type

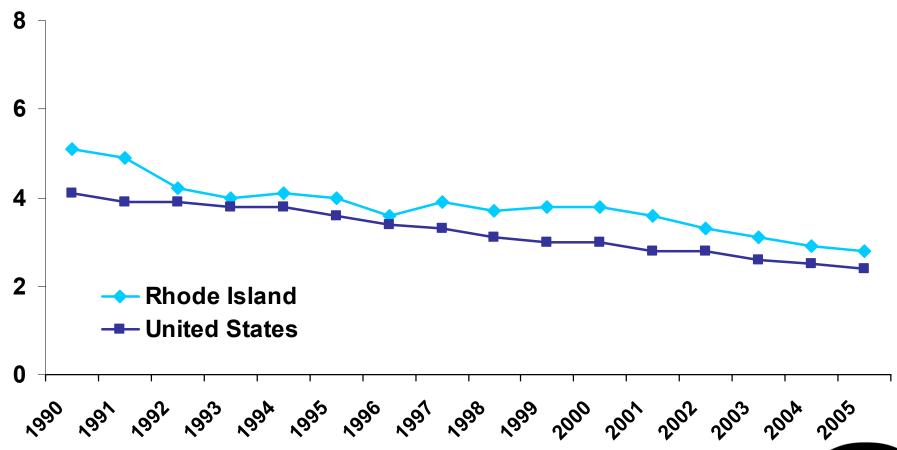






# Incidence Rates Are Continuing to Trend Lower in Both Rhode Island and the U.S.

Cases With Days Away from Work, Job Transfer, or Restriction per 100 Full-time Workers, Private Industry



# The Change in Frequency Over the Business Cycle

Frequency Tracks With the Business Cycle

Because

Time on the Job and Experience Matter



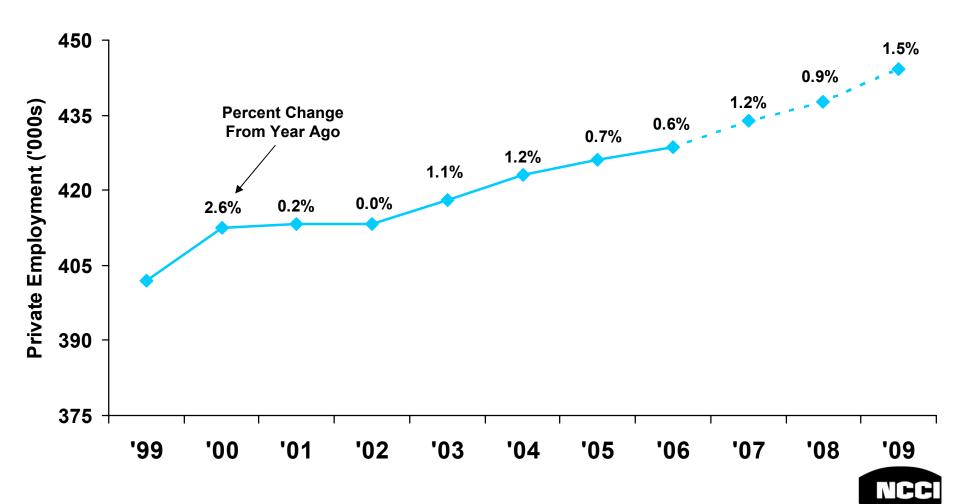
### Frequency of Injuries: Experience Matters

## **Inexperienced Have a Disproportionately High Share of Total Injuries**

Time With Current Employer	Share of Employment (2006)	Share of All Injuries (2005)	Relative Difference Share of Injuries vs. Employment
Less Than 1 Year	24.4%	35.0%	43.6% : Higher
1–5 Years	36.8%	34.1%	-7.3% : Lower
5+ Years	38.8%	30.9%	-20.5% : Lower

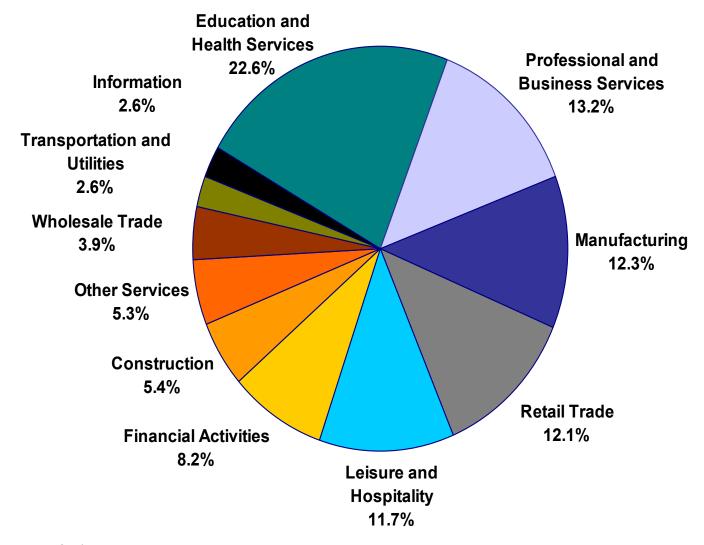


# Continued Increases in Private Employment in Rhode Island Are Expected Through 2009



### **Private Employment in Rhode Island**

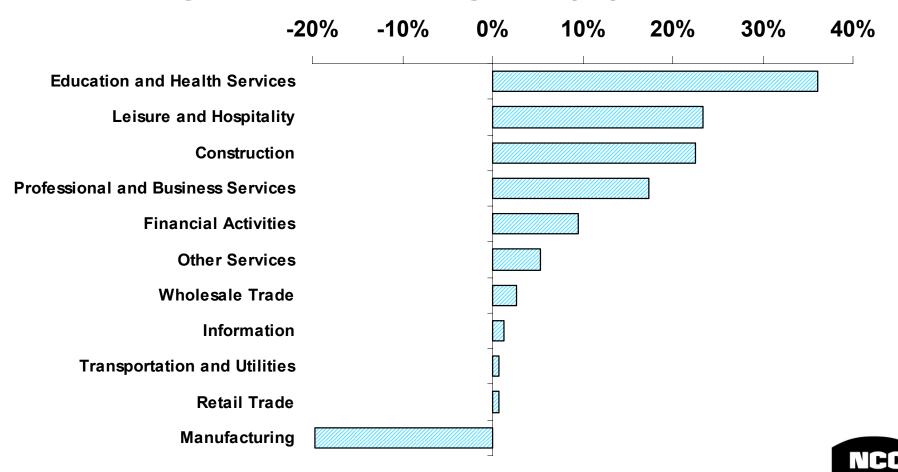






## Much of Rhode Island's Job Growth Is Expected to Come From the Education and Health Services Sector

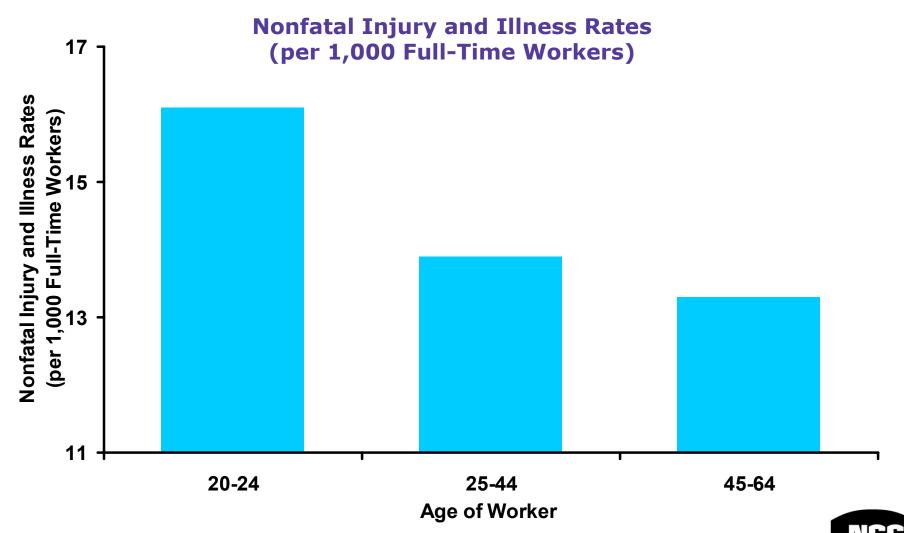
Percentage Contribution to Change in Employment, 2006-2009



### **Impact of Demographics on Frequency**



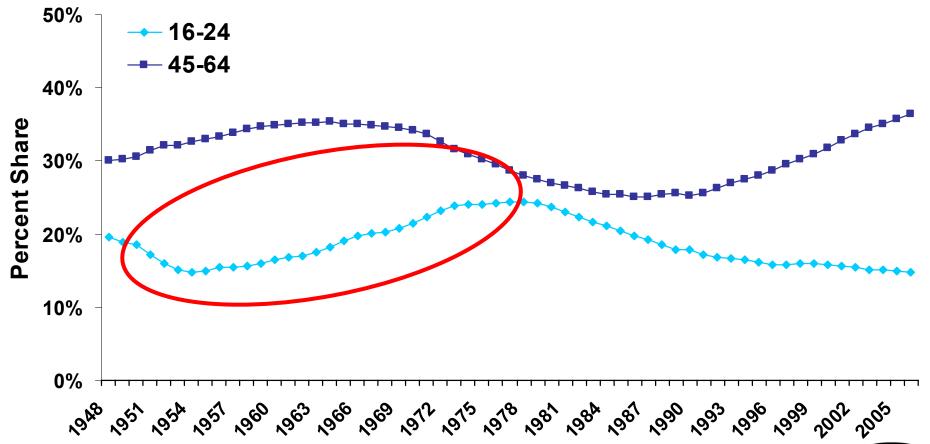
# Frequency Is Inversely Related to the Age of the Worker



Source: NCCI estimate using data from the U.S. Bureau of Labor Statistics Calculated from cases with Days Away From Work, 2003-2005

### **High and Low Frequency Age Groups**

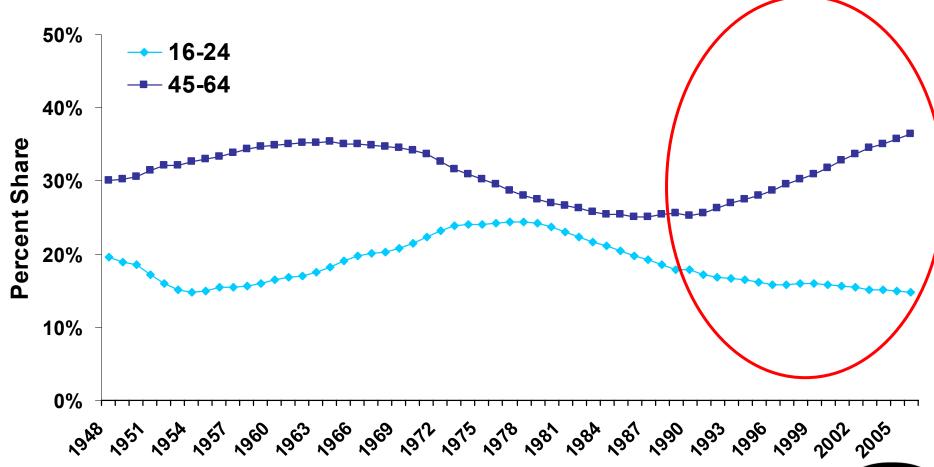
Age Distribution of Labor Force 16-24 vs. 45-64





### **High and Low Frequency Age Groups**

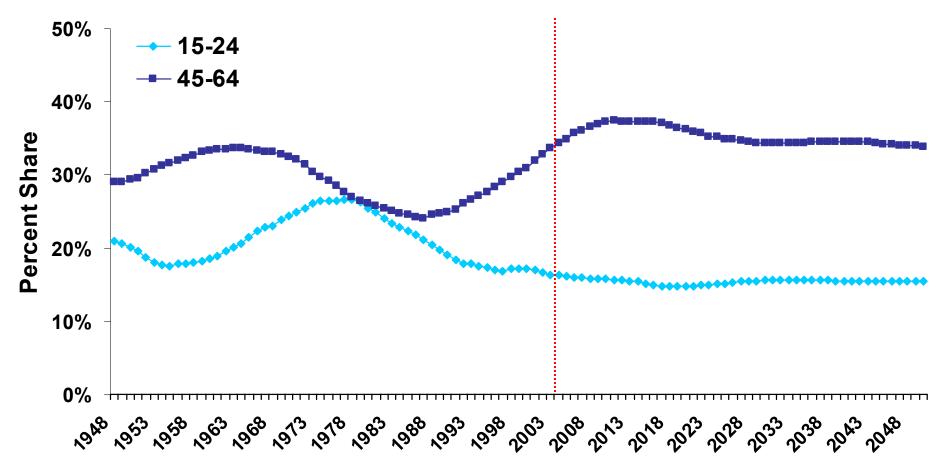
Age Distribution of Labor Force 16-24 vs. 45-64





## **Forecasts of Labor Force Shares Show Only Small Changes in the Future**

Percent of the Labor Force



Source: NCCI; derived data for all years (including historical period) Estimates obtained by multiplying labor force participation rates by age cohort (from U. S Bureau of Labor Statistics) by the population for each cohort (historical and projected population data from the U.S. Census Bureau). Participation rates are only available through 2006, so 2006 values were used for future years. 31



## Impact of Age on Frequency Trends: Key Takeaways

- Younger workers tend to have higher claim frequency than older workers
- The entering and exiting of baby boomers from the workforce help to explain broad changes in claim frequency since the early 1960s
- Projections of the age distribution of the labor force suggest that age will play a more neutral role in frequency changes in the coming years



# Factors Affecting the Long-Term Downtrend in Frequency



### Why Frequency Has Been Trending Lower

- Continuing improvement in productivity
- Impact of global competition
- Technology
- Indirect impacts of OSHA



# The Change in Frequency Since the Early 1990s

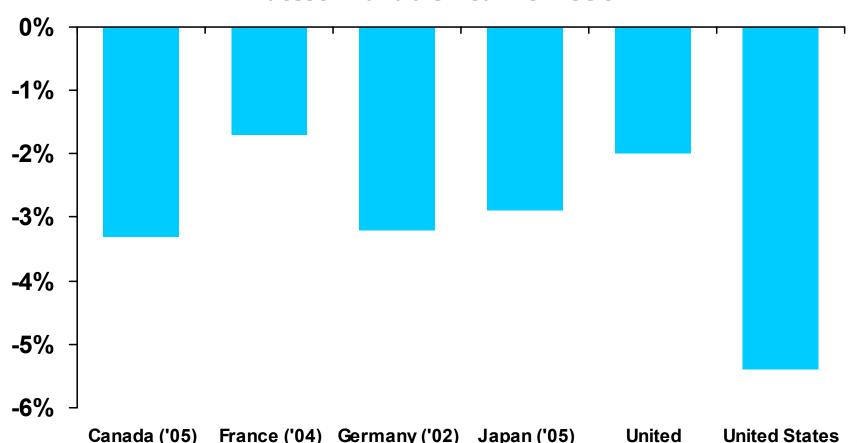
The key findings of NCCI research indicate that the decline is broadly-based:

- Across virtually all states
- Across industries and occupations and
- Across virtually all "injury demographics" including
  - Gender
  - Event
  - Source
  - Body part injured



# Injury Incidence Rates Are Declining in Major Industrial Nations

Average Annual Percent Decline in Nonfatal Injury Incidence Rates, Latest Available Year vs. 1996



Source: International Labor Organization.

Number in parenthesis is the latest year for which data are available.

('05)

Kingdom ('04)

## **Key Takeaways— Drivers of Claim Frequency**

- Prospects for claim frequency partly reflect the strength of the business cycle/employment growth
- Analysis for Rhode Island suggests the economy will exert modest upward pressure on claim frequency in the coming years
- Younger workers tend to have higher claim frequency
- Age is likely to be less of a factor in affecting claim frequency going forward than previously
- Continued downward pressure on claim frequency is likely as a result of ongoing impacts from globalization and productivity improvement



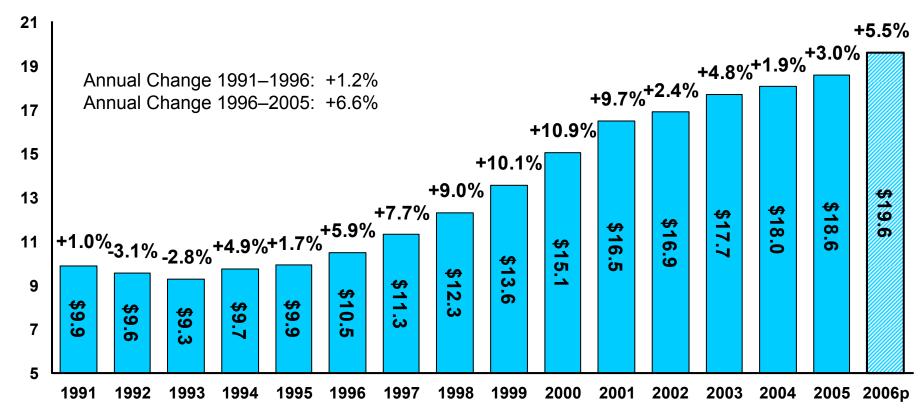
**'07 STATE ADVISORY FORUMS** 

## **Indemnity Severity**

### Countrywide Workers Compensation Indemnity Claim Costs

**Lost-Time Claims** 

Indemnity
Claim Cost (000s)



#### **Accident Year**

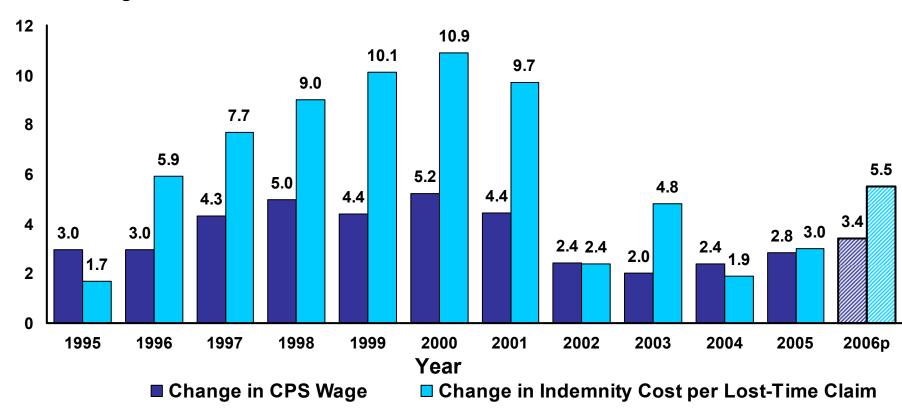
2006p: Preliminary based on data valued as of 12/31/2006 1991–2005: Based on data through 12/31/2005, developed to ultimate Based on the states where NCCI provides ratemaking services. Excludes the effects of deductible policies.



## Countrywide Indemnity Severity Outpacing Wage Inflation in 2006

#### **Lost-Time Claims**

#### **Percent Change**



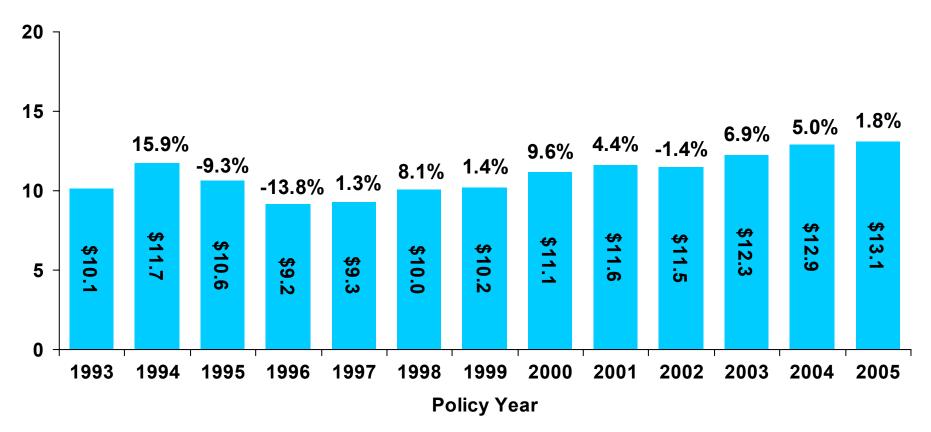
Indemnity severity 2006p: Preliminary based on data valued as of 12/31/2006 Indemnity severity 1995–2005: Based on data through 12/31/2005, developed to ultimate Based on the states where NCCI provides ratemaking services, excludes the effects of deductible policies. Source: CPS Wage—All states (Current Population Survey), Economy.com; Accident year indemnity severity—NCCI states, NCCI



### Rhode Island Workers Compensation Indemnity Claim Costs

**Lost-Time Claims** 

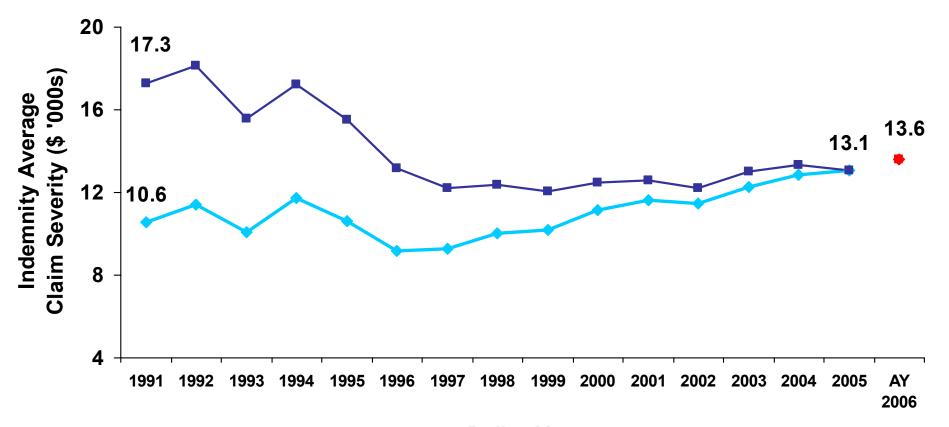
Indemnity
Claim Cost (000s)



Based on data through 12/31/06, on-leveled and developed to ultimate.



### Rhode Island's Average Indemnity Severity

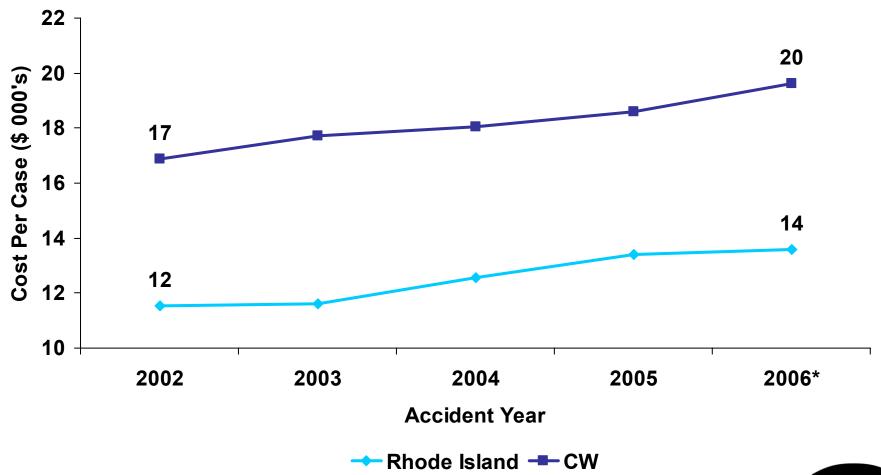


Policy Year

→ Actual → Adjusted to Current Wage Level



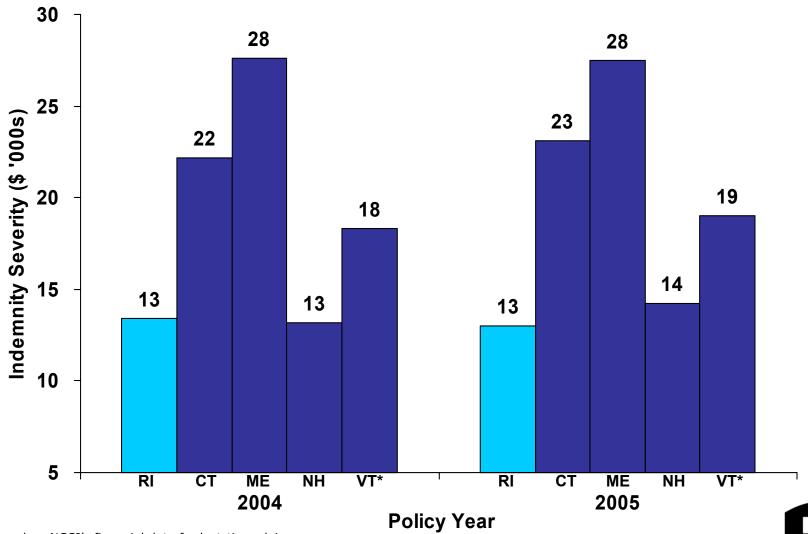
## Rhode Island Indemnity Average Cost per Case vs. Countrywide



\* Countrywide figure is preliminary Source: NCCI Financial Call data valued as of 12/31/06



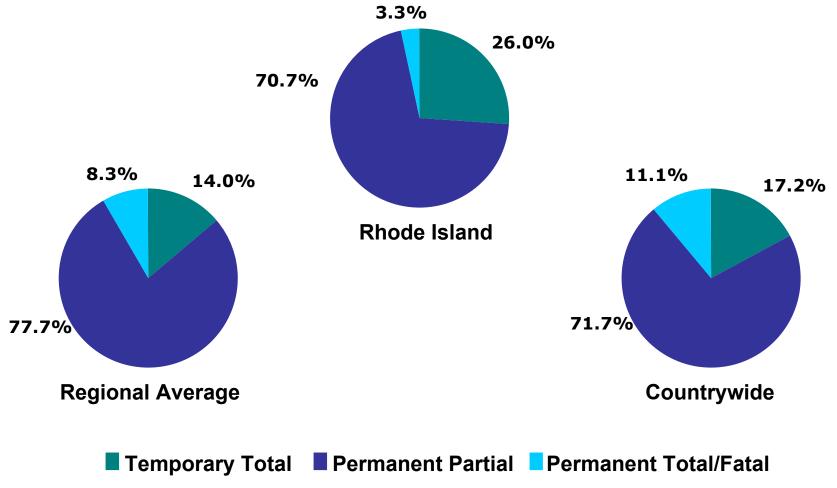
### **Rhode Island's Indemnity Average Claim Severity**



Based on NCCI's financial data for lost-time claims.

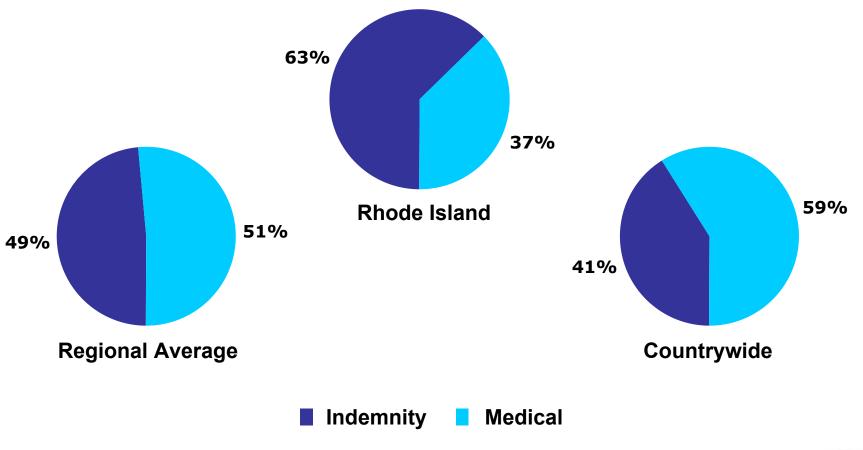
<sup>\*</sup> Preliminary

## Rhode Island's Indemnity Loss Distribution by Injury Type





# Indemnity Benefits Constitute the Majority of Total Benefit Costs in Rhode Island







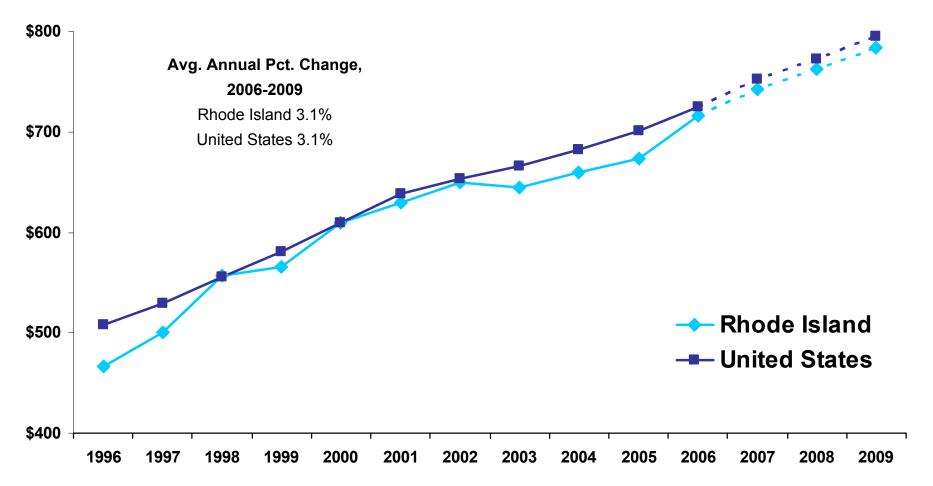
### **Economic Drivers of Indemnity Severity**

- Wages
  - Rhode Island-specific information

- Demographics
  - How indemnity severity varies by age



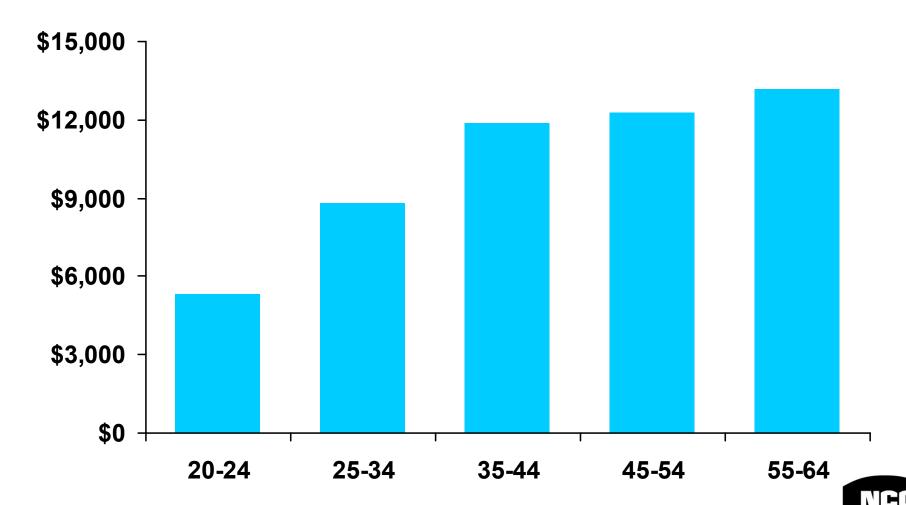
## Rhode Island's Average Weekly Wage Compared With That of the U.S.





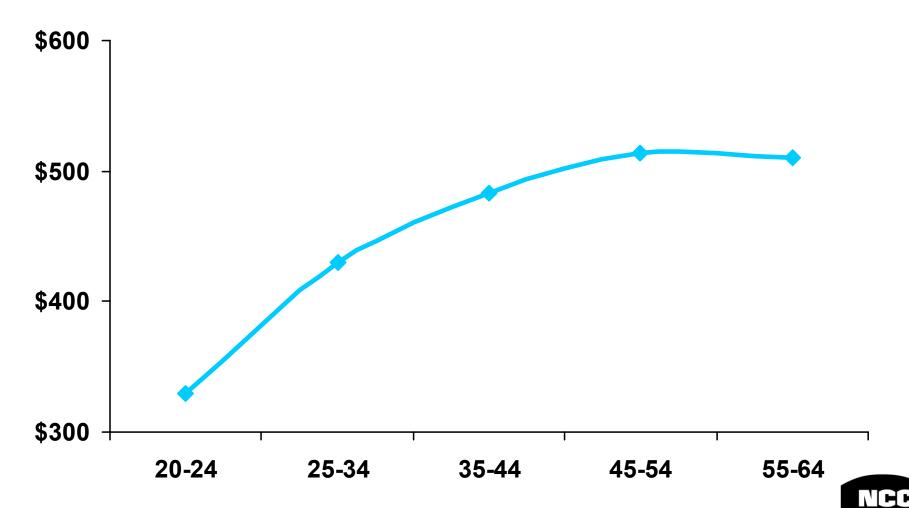
### **Indemnity Severity Increases With Age**

Average Paid + Case Indemnity Severity Reported at 18 Months by Age for Accident Year 2004, NCCI States



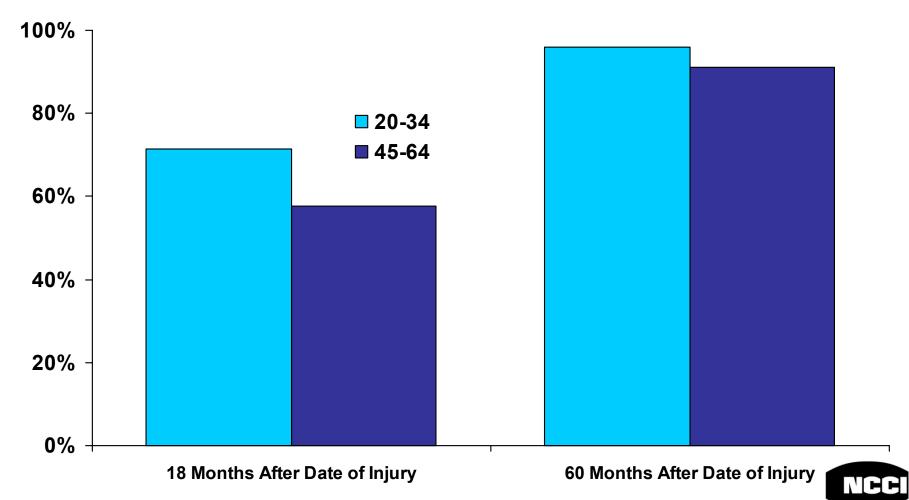
### **Average Weekly Wage Increases With Age**

Average Weekly Wage of Injured Workers Closed Claims at 60 Months, 1996-2003, NCCI States



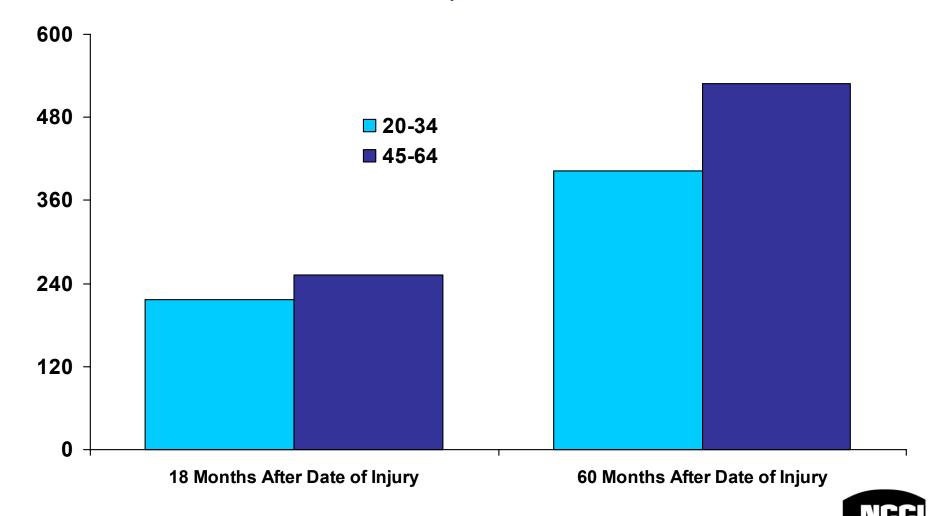
## Older Workers Have Fewer Claims Closed Than Younger, Both at 18 and 60 Months After Injury

Percent of Claims That Are Closed, 1996-2003, NCCI States



### **Average Duration Is Longer for Older Workers**

Average Days from Date of Injury to Closure, Closed Claims 1996-2003, NCCI States



## **Key Takeaways— Drivers of Indemnity Severity**

 Projected wage increases in Rhode Island suggest upward pressure on indemnity severity in the coming years

Indemnity severity tends to increase with age





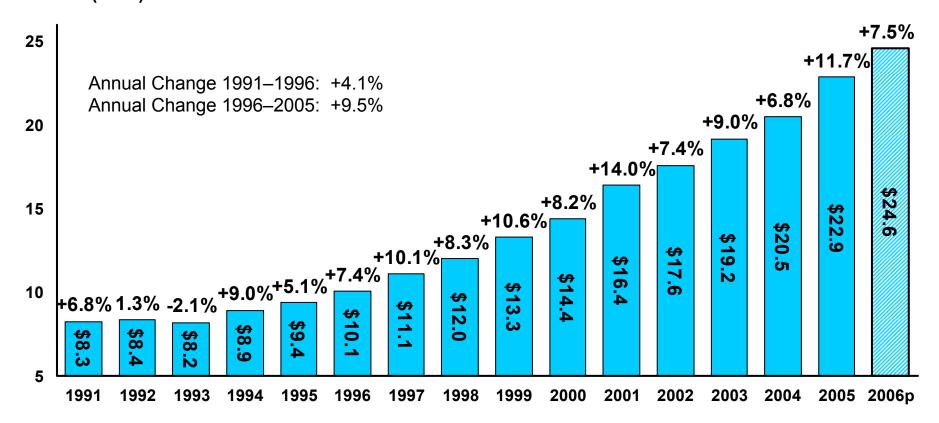
**'07 STATE ADVISORY FORUMS** 

## **Medical Severity**

## Countrywide WC Medical Claim Cost Trends—Growth Continues in 2006

Medical
Claim Cost (000s)

#### **Lost-Time Claims**



#### **Accident Year**

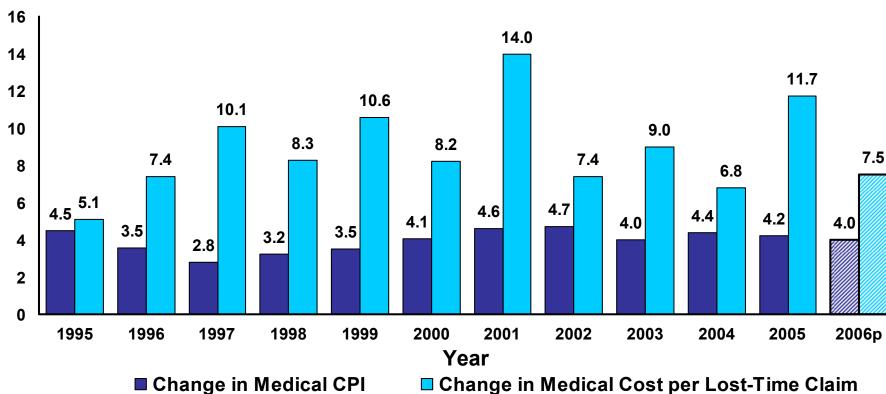
2006p: Preliminary based on data valued as of 12/31/2006 1991–2005: Based on data through 12/31/2005, developed to ultimate Based on the states where NCCI provides ratemaking services. Excludes the effects of deductible policies.



## Countrywide WC Medical Severity Still Growing Much Faster Than the Medical CPI

#### **Lost-Time Claims**





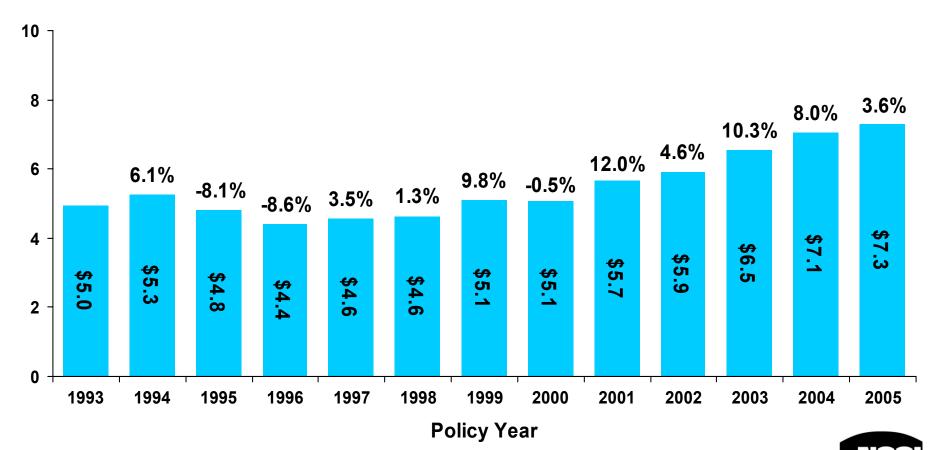
Medical severity 2006p: Preliminary based on data valued as of 12/31/2006 Medical severity 1995–2005: Based on data through 12/31/2005, developed to ultimate Based on the states where NCCI provides ratemaking services, excludes the effects of deductible policies. Source: Medical CPI—All states, Economy.com; Accident year medical severity—NCCI states, NCCI



### Rhode Island Workers Compensation Medical Claim Cost Trends

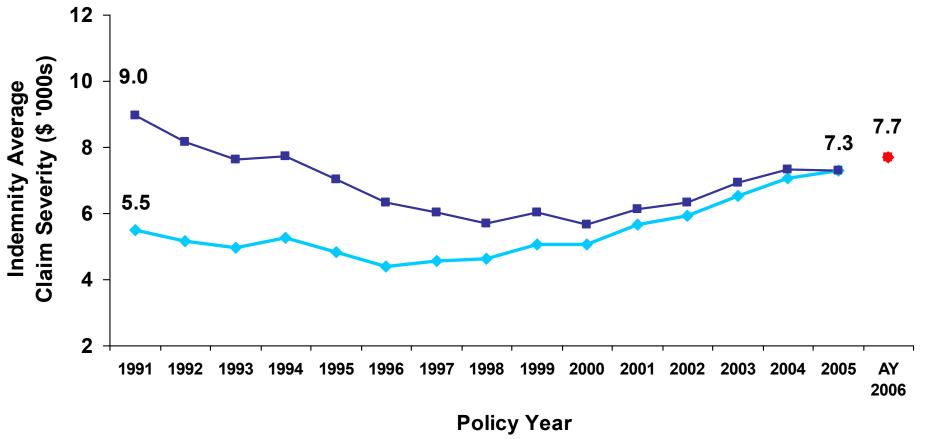


**Lost-Time Claims** 



Based on data through 12/31/06, on-leveled and developed to ultimate

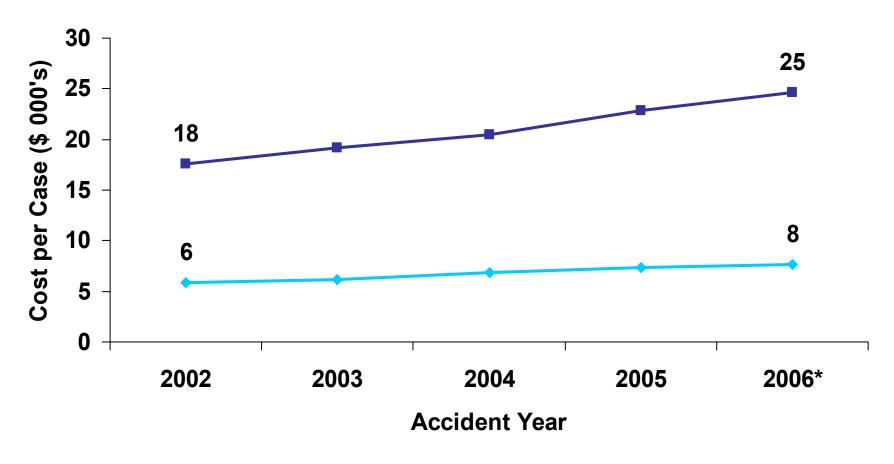
### Rhode Island's Average Medical Severity



→ Actual → Adjusted to Current Wage Level



### Rhode Island Medical Average Cost per Case vs. Countrywide

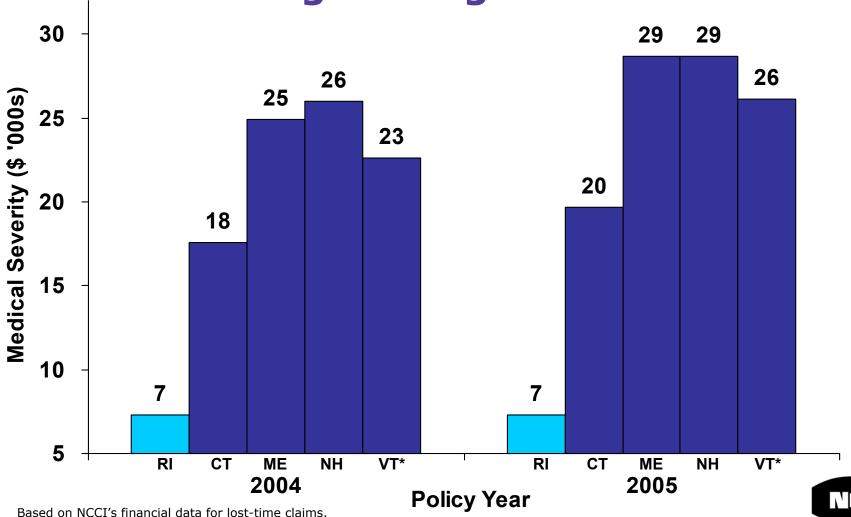


→ Rhode Island → CW



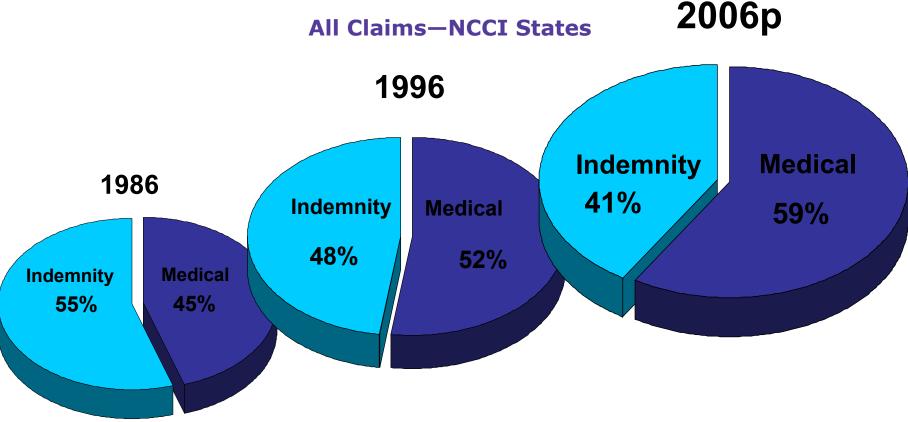
<sup>\*</sup> Countrywide figure is preliminary Source: NCCI Financial Call data valued as of 12/31/06

### Rhode Island's Medical Average Claim Severity Compared With Neighboring States



\* Preliminary

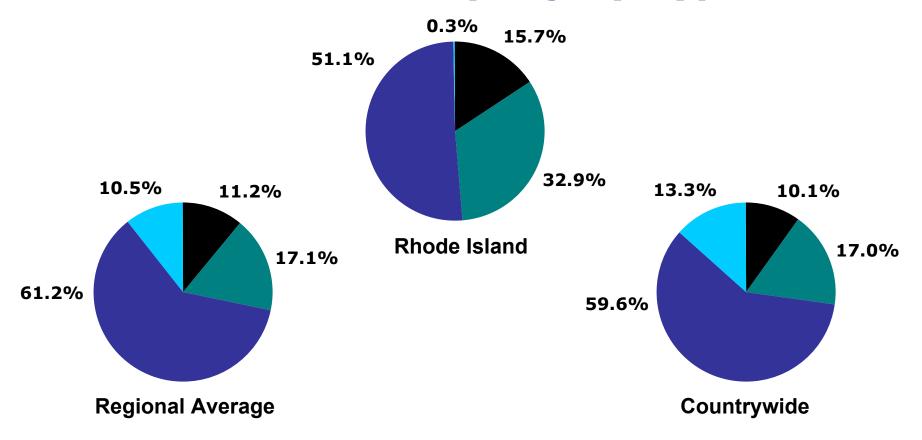
# Workers Compensation Medical Losses Are More Than Half of Total Losses on a Countrywide Basis



2006p: Preliminary based on data valued as of 12/31/2006 1986, 1996: Based on data through 12/31/2005, developed to ultimate Based on the states where NCCI provides ratemaking services. Excludes the effects of deductible policies.



## Rhode Island's Medical Loss Distribution by Injury Type



■ Medical Only ■ Temporary Total ■ Permanent Partial ■ Permanent Total/Fatal



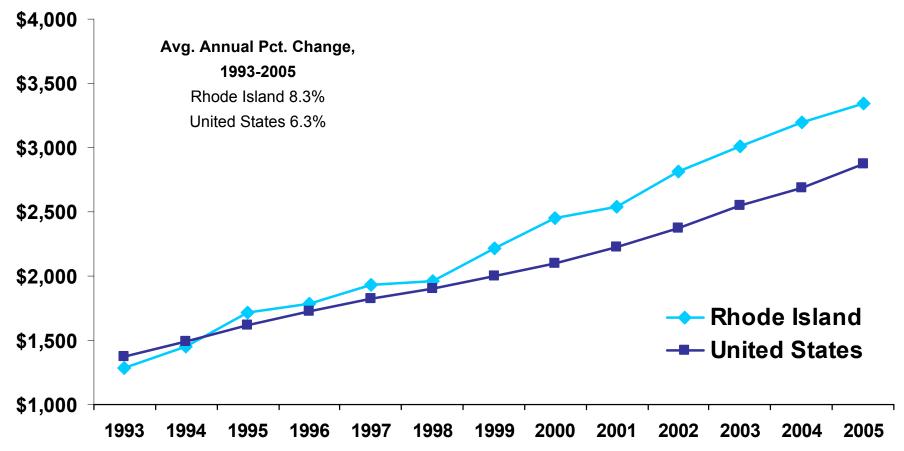
### **Factors Affecting Medical Severity**



### **Internal Hospital Costs in Rhode Island**

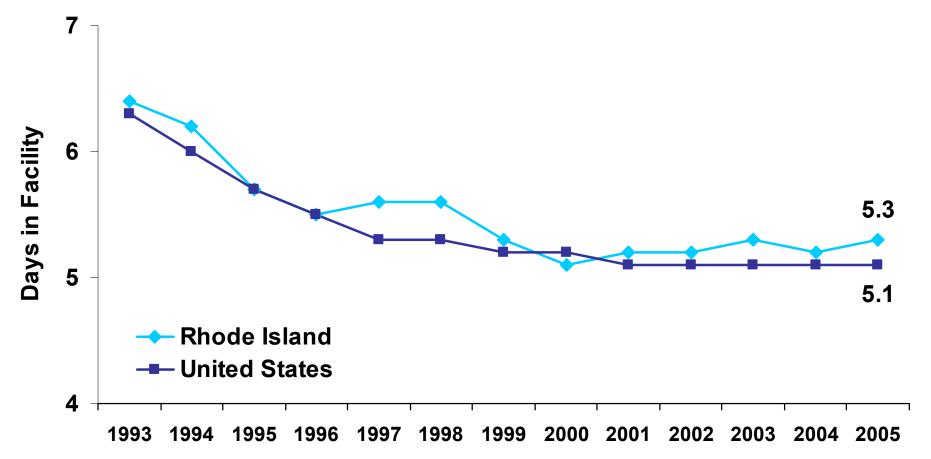


## Rhode Island's Avg. Hospital Cost per Day: Above the U.S., Increasing More Rapidly



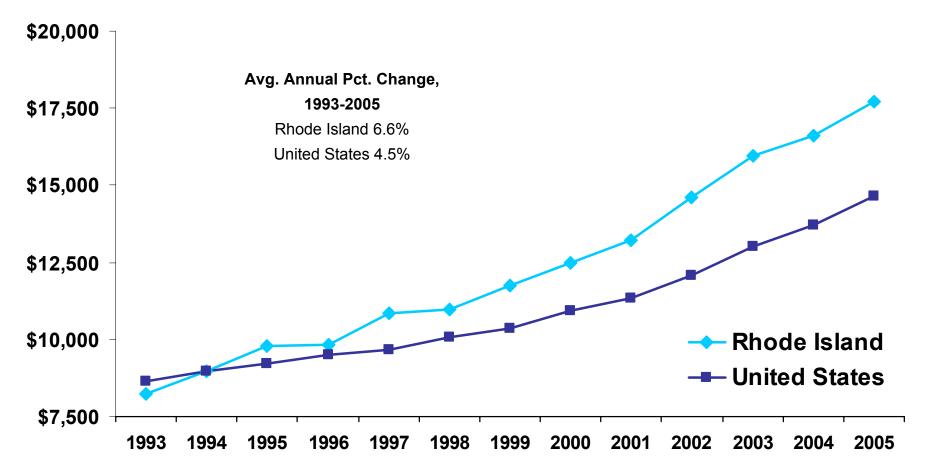


## Average Length of Stay in Rhode Island's Hospitals: In Line With That of the U.S.





## Rhode Island's Avg. Hospital Cost per Stay: Higher Than the U.S., Rising More Rapidly

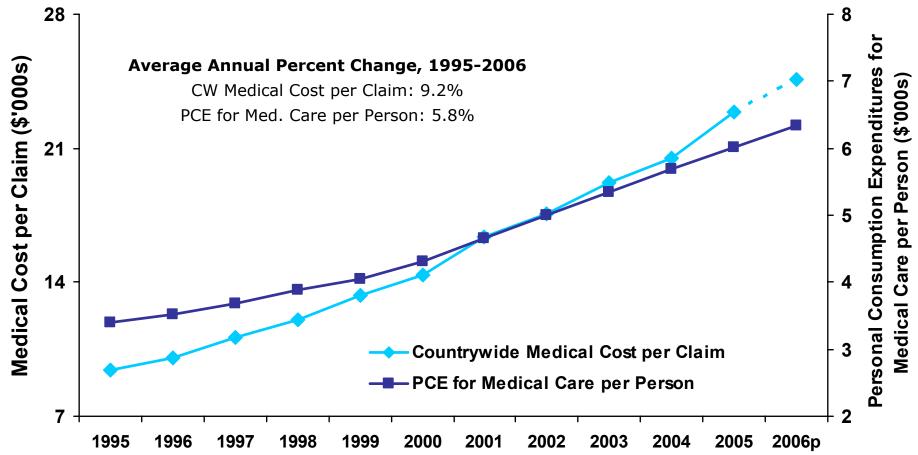




## Medical Care Spending, Prices, and Utilization



### Countrywide Medical Cost per Claim Is Increasing Faster Than Medical Care Spending per Person



2006p: Medical Cost per Claim is preliminary, based on data valued as of 12/31/2006 1995–2005: Based on data through 12/31/2005, developed to ultimate Based on the states where NCCI provides ratemaking services. Medical Cost per Claim Data reported on an Accident Year basis.

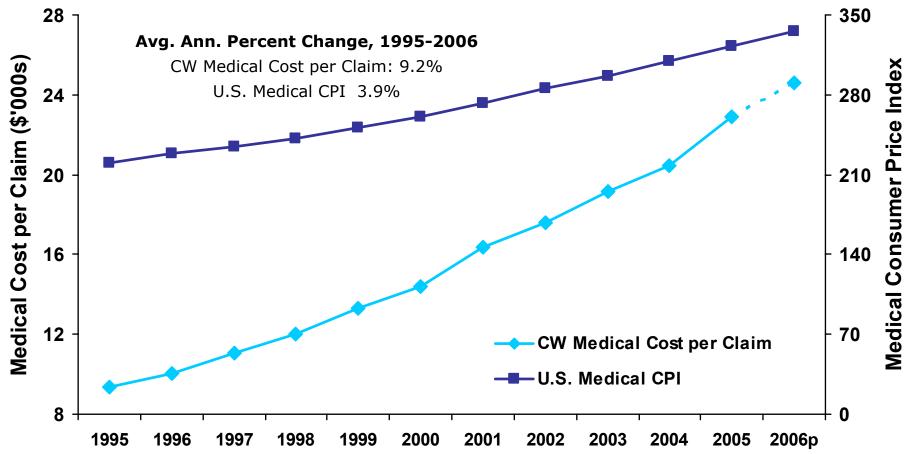
Excludes the effects of deductible policies.

Source: NCCI, U.S. Bureau of Economic Analysis



### Countrywide Medical Cost per Claim Is Outpacing the Medical Care CPI

Medical Cost per Claim vs. Medical CPI (1982-84=100)



2006p: Medical Cost per Claim is preliminary, based on data valued as of 12/31/2006 1995–2005: Based on data through 12/31/2005, developed to ultimate Based on the states where NCCI provides ratemaking services. Medical Cost per Claim Data reported on an Accident Year basis.

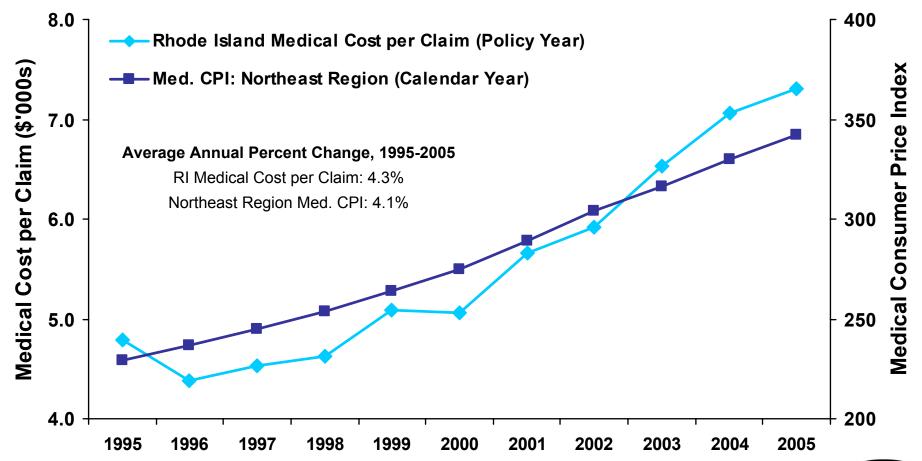
Excludes the effects of deductible policies

Source: NCCI, U.S. Bureau of Labor Statistics, Moody's Economy.com



## Medical Cost per Claim in Rhode Island Is Increasing in Line With the Medical Care CPI

Medical Cost per Claim vs. Regional Medical CPI (1982-1984=100)

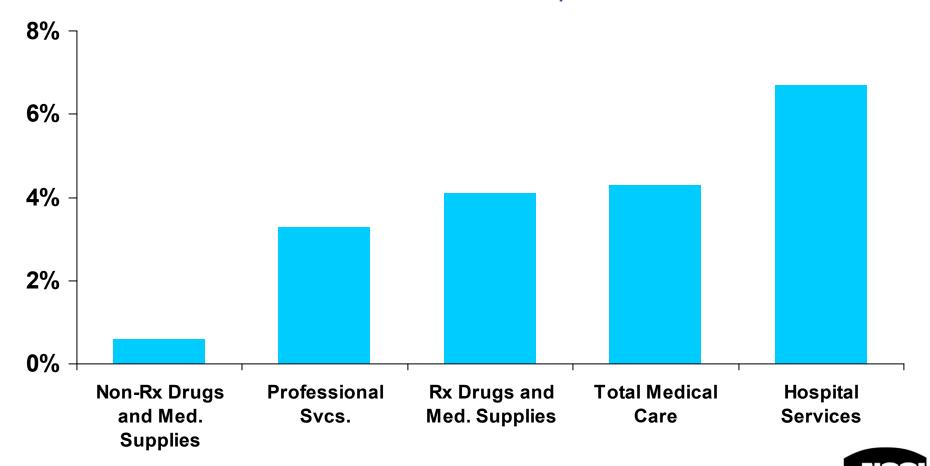


Medical Severity is represented above as ultimate medical losses without adjustments for either wage or benefit changes. Source: U.S. Bureau of Labor Statistics, NCCI



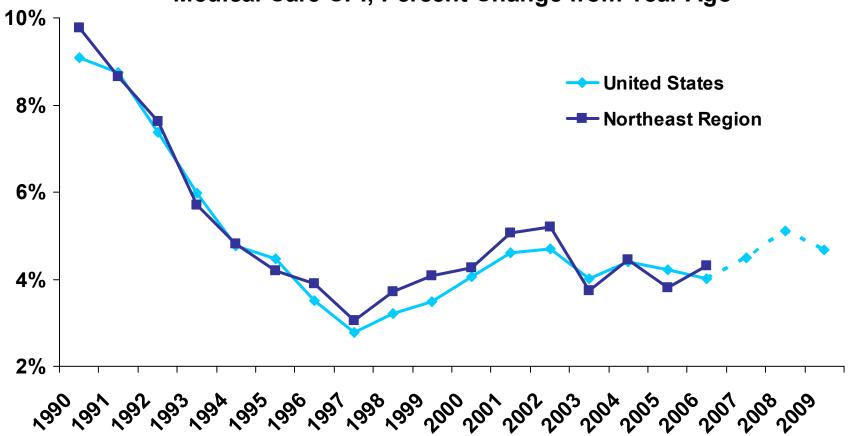
## Medical Care Price Increases Are Highest for Hospital Services

Average Annual Pct. Change in Components of the U.S. Medical Care CPI, 2000-2006



#### Further Increases in Medical Care Inflation Are Expected Through 2009

Medical Care CPI, Percent Change from Year Ago





#### Increases in Medical Care Spending Reflect Increases in Both Prices and Utilization

Percent Change from Year Ago, National Data Full Height of Bar is the Pct. Change in PCE for Med. Care per Person 10% 8% Utilization Medical CPI 6% 4% 2% 0% 2001 2003 2006 1995 1996 1997 1998 1999 2000 2002 2004 2005



#### Changes in Utilization Can Come From Many Sources

- Changes in the number of services provided
- Changes in treatment modalities (use of MRIs instead of X-rays)
- Introduction of newer pharmaceuticals/generics
- Adaptive practices by providers

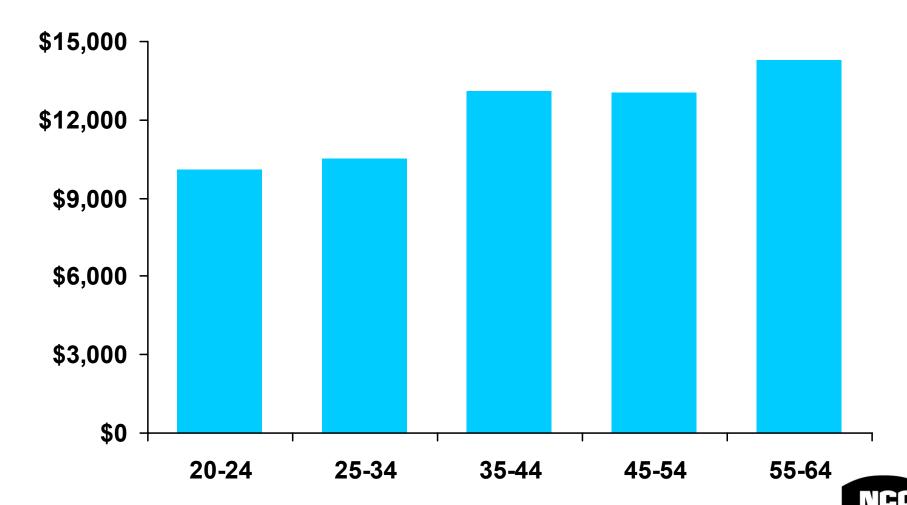


# Demographic Impacts on Workers Compensation Medical Costs

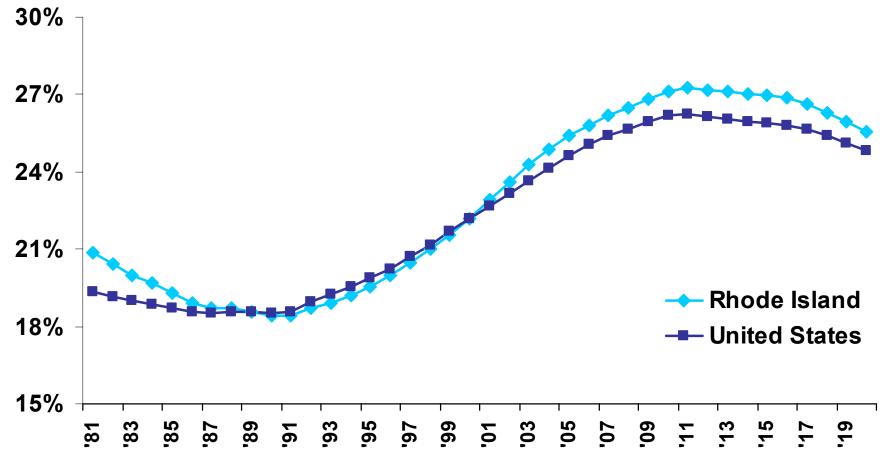


#### **Medical Severity Increases With Age**

Average Paid + Case Medical Severity Reported at 18 Months by Age for Accident Year 2004, NCCI States



#### The Share of Rhode Island's Population Aged 45 to 64 Is Expected to Peak in 2011, as the Baby Boomers Age





#### Rankings of Top Ten Lost-Time Claim Diagnoses

1996-2003, NCCI States

Ages 20-34

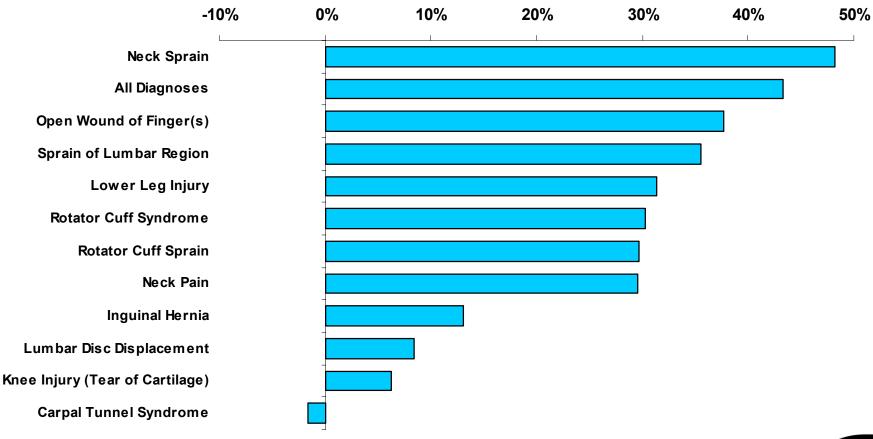
Ages 45-64

1	SPRAIN LUMBAR REGION	1	CARPAL TUNNEL SYNDROME
2	LUMBAR DISC DISPLACEMENT	2	LUMBAR DISC DISPLACEMENT
3	CARPAL TUNNEL SYNDROME	3	SPRAIN ROTATOR CUFF
4	LUMBAGO	4	TEAR MENISCUS KNEE
5	CERVICALGIA	5	CERVICALGIA
6	LOWER LEG INJURY NOS	6	SPRAIN LUMBAR REGION
7	SPRAIN OF ANKLE NOS	7	ROTATOR CUFF SYNDROME NOS
8	SPRAIN OF NECK	8	LUMBOSACRAL NEURITIS NOS
9	LUMBOSACRAL NEURITIS NOS	9	LUMBAGO
10	SPRAIN LUMBOSACRAL	10	LOWER LEG INJURY NOS



# Older Workers Have a Higher Number of Treatments per Claim

Pct. Difference in Avg. No. of Treatments per Claim, Workers Aged 45-64 vs. 20-34\*, NCCI States, 1996–2003



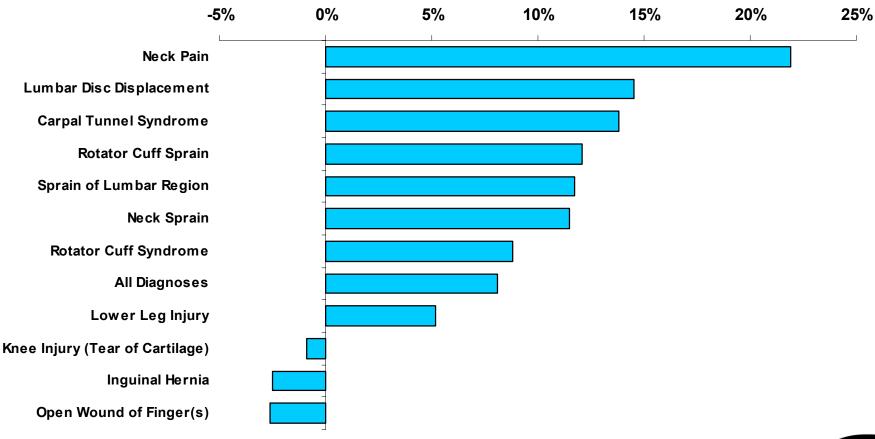
<sup>\*</sup> Based on a comparison of cumulative medical payments through latest evaluation.

Source: NCCI



# **Average Price per Treatment Is Generally Higher for Older Workers**

Pct. Difference in Avg. Price per Treatment, Workers Aged 45-65 vs. 20-34\*, NCCI States, 1996-2003



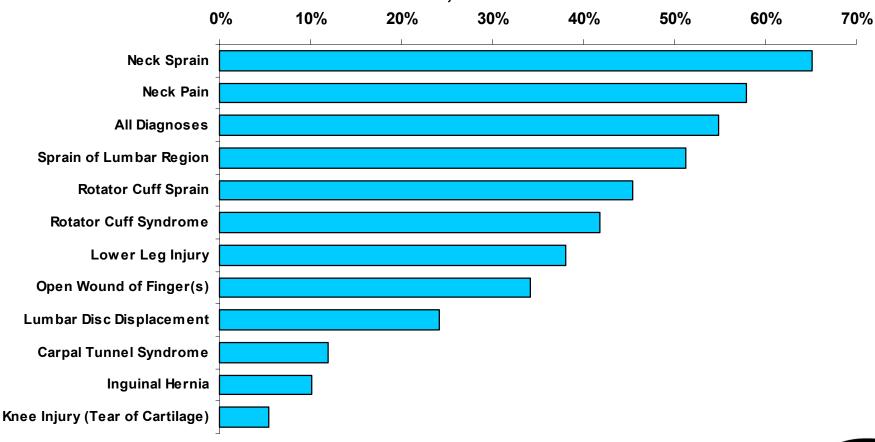
<sup>\*</sup> Based on a comparison of cumulative medical payments through latest evaluation.

Source: NCCI



# Medical Severity Is Substantially Higher for Older Workers

Pct. Difference in Medical Severity, Workers Aged 45-64 vs. 20-34\*, NCCI States, 1996-2003



<sup>\*</sup> Based on a comparison of cumulative medical payments through latest evaluation. Source: NCCI



#### **Key Takeaways— Drivers of Medical Severity**

- Ongoing increases in medical inflation and utilization suggest further upward pressure on medical severity in Rhode Island
- Medical severity increases with age
- Upward pressure on medical severity is likely to diminish as the baby boomers exit the workforce





#### **'07 STATE ADVISORY FORUMS**

Q & A



**'07 STATE ADVISORY FORUMS** 

# Closing Remarks Thank You!